Author's response to reviews

Title: Rapid short-duration hypothermia with cold saline and endovascular cooling before reperfusion reduces microvascular obstruction and myocardial infarct size

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Dear Editors

Thank you for the acceptance in principle of the manuscript. We are grateful for the positive comments and final acceptance from reviewer 2 and 3.

Reviewer 1 has one repeated comment which he stated in the previous review regarding the use of the term microvascular obstruction. We argued strongly against his opinion in our previous answer. Again we disagree with him and believe that it is of great importance to use the term for the reader to understand the article.

The following modified passage is included in the discussion section but in the article only one of the seven references under c has been included:

¿The methods for ex vivo quantification of patchiness index and microvascular obstruction are novel methods that have not been validated as such, however we have previously shown that ex vivo contrast enhanced T1 weighted MRI, as used in our study, shows excellent agreement with in vivo delayed enhancement MRI [35]. Algorithms similar to that used for patchiness index in this study have previously been used for quantification and characterization of myocardial infarction using delayed enhancement MR imaging (ref a). Demonstration, quantification and validation of microvascular obstruction in MR imaging have been performed with microspheres in experimental models (ref b) and extensively studied in humans using both first-pass MR perfusion imaging and delayed contrast enhanced MR imaging (ref c).¿

Ref b: Wu et al. JACC 1998;32:1756-64
Ref c:
Wu et al. Circulation 1998;97;765-772
Gerber et al. Circulation 2000;101;2734-2741
Baks et al. J Am Coll Cardiol 2006;47:40¿4)
Lund et al. Radiology 2007; 245¿102

We have also gone through the manuscript formatting checklist one more time and ensured that the revised manuscript conforms to all of the points.

We hope that the manuscript now will be accepted for publication in BMC cardiovascular disorders.

I hereby declare that the manuscript in its whole or part of it neither has been published nor is under consideration for publication by any other journal. I also declare that the co-authors have read the manuscript and approved its submission. Any cost for printing colour figures will be paid for upon final acceptance of the manuscript.

Best Regards
Yours Sincerely

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